



App /contrl Number 10/006,444

12-04-06

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Attn: Mr. Behrooz Senfi, Art Unit 2613
Commissioner of Patents and Trademarks
Washington, D.C. 20231

December 01, 2006

Dear Mr. Senfi:

This communication is in regard to Patent Application Serial No. 10/006,444 entitled "Optimizations for Live Event, Real-time, 3D Object Tracking."

In response to your Office Action dated September 6, 2006, please cancel Claims 50-96 and add the following new Claims 97-124.

Claim 97. (New) A system for automatically videoing the activities of one or more participants and objects as they move about within a predefined area, during a predefined time, comprising:

a first set of two or more stationary cameras for generating a first video stream of images that together form a contiguous view of the predefined area, continuously throughout the predefined time, where the first video stream of images is exclusively responsible for providing the data necessary to determine the relative ongoing centroid X, Y location of each and every participant and object moving in the entire predefined area throughout the entire duration of tracking, regardless of the current centroid location of any one or more participants or objects within that area;

a first algorithm operated on a computer system responsive to the first stream of video images for simultaneously analyzing the continuous images from each first camera in order to first detect the presence of any one or more participants and / or objects within each and every camera's view and then to second determine each detected participant's and / or object's relative centroid X, Y location within that view, where dimensional characteristics of each detected participant and / or object, such as its size, may also be determined during the process, and third for continuously throughout the predefined time combining this determined information from each and every first set camera into a tracking database of at least the ongoing centroid X, Y coordinates of each one or more participants and objects, relative to the entire predefined area, and

a second algorithm operated on a computer system responsive to the tracking database both established and continuously updated exclusively using provided by the first set of cameras, for dynamically adjusting the current view of each one or more cameras